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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,314	04/09/2001	Steven C. Dzik	Dzik 7	7112

7590 12/07/2004
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EXAMINER

VOLPER, THOMAS E

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,314

Applicant(s)

DZIK, STEVEN C.

Examiner

Thomas Volper

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings filed 9 July 2001 are objected to because they do not include Figures 2C, 2D, and 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwan (US 2003/0112796).

Regarding claims 1-4, 13-16, and 25-27, Kwan discloses retrieving a packet from an input buffer; determining at least one parameter of audio information contained within said packet, wherein the parameter comprises a pitch; and adapting the determined parameter to provide an appropriate parameter transition to audio information within a non-sequentially following packet, wherein the transition is at least a portion of a pitch period that is synthesized to bridge a gap between the retrieved and non-sequential packets (paragraphs [0224]-[0232]). Kwan also discloses adjusting a playtime for the retrieved packet based on a time of arrival of a sequentially following packet (paragraphs [0215]-[0222]).

Regarding claims 5 and 17, Kwan discloses determining target hold times before releasing packets from a jitter buffer (paragraph [0218]), which meets the limitation of determining play out times. Kwan also discloses that the voice synchronizer also operates with packets arriving out of order and with lost packets (paragraph [0222]).

Regarding claims 6, 7, 18, 19, and 28-30, Kwan discloses that the voice traffic is sent from a far end in an isochronous manner, meaning one packet after the other without delay (paragraph [0217]). The estimated time of arrival of a sequentially following packet is necessarily immediately after a currently received packet. Thus, the target holding time of Kwan comprises an estimated arrival time as well as an estimated worst case jitter, which meets the limitation of a latency.

Regarding claims 8, 9, 20, 21, and 33, Kwan discloses decreasing the holding time rapidly to minimize excessive end to end delay, which is accomplished by passing two voice frames to the voice decoder in one decoding interval but only one of the voice frames is transferred to the media queue (paragraph [0220]). This meets the limitation of reducing the play time of a packet. Kwan does not disclose reducing the play time by greater than a factor of two.

Regarding claims 10, 22, and 34, Kwan discloses that two voice frames may be sent to the voice decoder, and only one may be sent to the media queue in order to compress the voice data, as mentioned above. Also, Kwan discloses stretching pitch periods to cover gaps in time due to lost packets (paragraph [0244]-[0252], [0258], and [0268]). It follows that when only one frame is played, when normally two would be played, that one frame is deleted, thus a pitch period is deleted.

Regarding claims 11, 12, 23, 24, 31, and 32, Kwan discloses expanding a play time of a received packet by synthesizing voice until the voice decoder receives a voice packet, or a timeout period has elapsed (paragraph [0228]). This synthesizing of voice requires determining a pitch period and synthesizing voice based on the pitch period (paragraphs [0244]-[0252], [0258], and [0268]).

Regarding claim 35, Kwan discloses that the reducing of holding times may be performed in response to excessive end to end delays created by long holding times (paragraph [0220]).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Chafe (US 6,801,939) Method for Evaluating Quality of Service of a Digital Network Connection

- DeMartin (US 6,775,649) Concealment of Frame Erasures for Speech Transmission and Storage System and Method

- Cohen (US 6,389,032) Internet Voice Transmission

- Kretschmer et al. (US 6,697,356) Method and Apparatus for Time Stretching to Hide Data Packet Pre-Buffering Delays

- Vargo et al. (US 6,167,060) Dynamic Forwarding Error Correction Algorithm for Internet Telephone

5. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is (571) 272-3151. The examiner can normally be reached between 8:30am and 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at (571) 272-3155. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Thomas E. Volper

TEV

November 30, 2004


HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600